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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/015,030

12/11/2001

Philip David Steiner

026-0013

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22120 7590 01/10/2007  
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EXAMINER

TSE, YOUNG TOI

ART UNIT

PAPER NUMBER

2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/015,030	STEINER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	YOUNG T. TSE	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-28 is/are allowed.
- 6) ☒ Claim(s) 30 is/are rejected.
- 7) ☒ Claim(s) 29 and 31-43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
- 1. ☐ Certified copies of the priority documents have been received.
  - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2006 has been entered.

### ***Claim Objections***

2. Claims 29-43 are objected to because of the following informalities:

In claim 29, line 3, "comparing a magnitude" should be "comparing a signal strength magnitude" in consistent with the apparatus claim 43.

In claim 30, line 6, "to count according to an output of the sample circuit;" should be "to generate a count value according to an output of the sample circuit," to overcome the antecedent basis of "the count value" recited in line 8 of the claim.

The dependent claims 31-41 are objected to because they are either directly or indirectly depended on the independent claim 30.

In claim 42, both lines 4 and 7, "signal threshold" should be "signal strength threshold".

In claim 43, lines 5-6, "signal strength" should be "signal strength magnitude".

See line 3 of the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higashino U. S. Patent No. 6,169,618 in view of Loinaz et al. U. S. Patent No. 6,377,082 (hereinafter "Loinaz").

Higashino discloses a digital automatic power controller in either Fig. 1 or Fig. 3. In Fig. 3, the digital automatic power controller comprises an amplifier 120, a sample

and hold circuit 130, a comparator 140, a counter 150, a D/A converter 160, and an LD drive circuit 170.

With respect to claim 30, the digital automatic power controller comprises a sample circuit (130 and 140) coupled to sample input data (AS) to provide a first value (C2) when signal strength magnitude of the sampled input data (SH) is above a signal strength threshold level (R2 and/or R3) and a second value (C3) when the signal strength magnitude of the sampled input data (SH) is below the signal strength threshold level (R2 and/or R3); and a counter circuit (150) coupled to count according to an output of the sample circuit (C2 and/or C3); wherein the count value is a number of input data samples having a signal strength above the signal strength threshold level. See the abstract, column 1, line 66 to column 2, line 27, and column 4, lines 7-14. Also see Fig. 1 and the discussion of Fig. 1.

However, Higashino fails to show a detailed view of the comparator 140 comprising a storage device for storing the first and second values prior to transmit the sampled output to the counter 150.

Loinaz discloses a loss-of-signal detector 300 in Fig. 3, which comprises a decision circuit 306, and XOR gate 317 and a counter 321. The decision circuit 306 includes two comparator 308 for comparing input data 102 with decision thresholds 304 to generate a first vale 301 and a second value 301 and two D-FFs 312 for temporary storing the values before transmitting the values to the counter 321 through the XOR gate 317.

Therefore, it would have been obvious to one of ordinary skill in the art that the comparator 140 in Higashino's digital automatic power controller is capable of comprising a storage device, such as the D-type registers provided in Loinaz's decision circuit for the purpose of temporary storing the sampled values C2 and C3 prior the transmission of the values to the counter 150.

***Allowable Subject Matter***

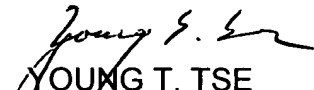
6. Claims 1-28 are allowed.
7. Claims 29 and 42-43 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.
8. Claims 31-41 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
YOUNG T. TSE  
Primary Examiner  
Art Unit 2611